Amendments to the Claims

Please amend Claims 32, 40, 44 and 48. The Claim listing below will replace all prior versions of the Claims in the application.

Claim Listing

1-31. Canceled.

32. (Currently Amended) A method comprising:

if an amount of data located in a first memory buffer in a local system associated with a remote direct memory access (RDMA) request does not exceed a maximum transfer size for a single memory to memory transfer operation over a data network to a remote memory buffer in a remote system:

associating the data with a first transfer operation; and

if the amount of data associated with the first transfer operation has not reached the maximum transfer size, associating a portion of the data associated with a subsequent transfer operation for the RDMA request located in one or more portions of one or more other memory buffers in the local system with the first transfer operation to the remote memory buffer.

33. (Previously Presented) The method of claim 32, additionally comprising transferring the data associated with the first transfer operation.

34. (Previously Presented) The method of claim 33, additionally comprising associating a descriptor with the first transfer operation, the descriptor to specify the remote memory buffer to which the data is to be transferred and to indicate a portion of data remaining to be transferred for the RDMA request.

35. (Previously Presented) The method of claim 32, additionally comprising associating data with one or more subsequent transfer operations.

36.   Canceled.

37.   (Previously Presented) The method of claim 32, additionally comprising:

        if the amount of data located in the first memory buffer exceeds the maximum transfer size:

            associating a portion of the data with the first transfer operation; and

            associating one or more subsequent portions of the data with one or more subsequent transfer operations.

38.   (Previously Presented) The method of claim 33, additionally comprising:

        associating a descriptor with the first transfer operation, the descriptor to specify the remote memory buffer to which the data is to be transferred and to indicate a portion of data remaining to be transferred for the RDMA request; and

        transferring the data associated with the first transfer operation.

39.   (Previously Presented) The method of claim 38, additionally comprising:

        associating another descriptor with each of the one or more subsequent transfer operations; and

        transferring the data associated with the one or more subsequent transfer operations.

40.   (Currently Amended) An apparatus comprising:

        an RDMA (remote direct memory access) manager operable to service one or more RDMA requests, and to:

        determine if an amount of data located in a first memory buffer in a local system associated with an RDMA request exceeds a maximum transfer size for a single memory to memory transfer operation over a data network to a remote memory buffer in a remote system, and:

if it is determined that the amount of data located in a first memory buffer does not exceed the maximum transfer size, then associate the data with a first transfer operation; and

if the amount of data associated with the first transfer operation has not reached the maximum transfer size associate a portion of the data associated with a subsequent transfer operation for the RDMA request located in one or more portions of one or more other memory buffers in the local system with the first transfer operation to the remote memory buffer.

41. (Previously Presented) The apparatus of claim 40, the RDMA manager additionally operable to transfer the data associated with the first transfer operation.

42. (Previously Presented) The apparatus of claim 40, the RDMA manager additionally operable to associate data with one or more subsequent transfer operations.

43. (Previously Presented) The apparatus of claim 40, the RDMA manager additionally operable to:

determine if the amount of data located in the first memory buffer exceeds the maximum transfer size, and:

if the amount of data located in the first memory buffer exceeds the maximum transfer size:

associate a portion of the data and a descriptor with the first transfer operation, the descriptor to specify the remote memory buffer to which the data is to be transferred and to indicate a portion of data remaining to be transferred for the RDMA request; and

associate one or more subsequent portions of the data with one or more subsequent transfer operations.

44. (Currently Amended) A system comprising:

a host fabric adapter; and

an RDMA (remote direct memory access) manager included in a software stack of the host fabric adapter, the RDMA manager operable to service one or more RDMA requests, and to:

determine if an amount of data located in a first memory buffer in a local system associated with an RDMA request exceeds a maximum transfer size for a single memory to memory transfer operation over a data network to a remote memory buffer in a remote system, and:

if it is determined that the amount of data located in a first memory buffer does not exceed the maximum transfer size, then associate the data with a first transfer operation; and

if the amount of data associated with the first transfer operation has not reached the maximum transfer size associate a port of the data associated with a subsequent transfer operation for the RDMA request located in one or more portions of one or more other memory buffers in the local system with the first transfer operation to the remote memory buffer.

45. (Previously Presented) The system of claim 44, the RDMA manager additionally operable to transfer the data associated with the first transfer operation.

46. (Previously Presented) The system of claim 44, the RDMA manager additionally operable to associate data with one or more subsequent transfer operations.

47. (Previously Presented) The system of claim 44, the RDMA manager additionally operable to:

determine if the amount of data located in the first memory buffer exceeds the maximum transfer size, and:

if the amount of data located in the first memory buffer exceeds the maximum transfer size:

associate a portion of the data and a descriptor with the first transfer operation, the descriptor to specify the remote memory buffer to which the data

is to be transferred and to indicate a portion of data remaining to be transferred for the RDMA request; and

associate one or more subsequent portions of the data located with one or more subsequent transfer operations.

48. (Currently Amended) An article comprising a machine-readable medium having machine-accessible instructions, the instructions when executed by a machine result in the following:

if an amount of data located in a first memory buffer in a local system associated with a remote direct memory access (RDMA) request does not exceed a maximum transfer size for a single memory to memory transfer operation over a data network to a remote memory buffer in a remote system:

associating the data with a first transfer operation; and

if the amount of data associated with the first transfer operation has not reached the maximum transfer size, associating a port of the data associated with a subsequent transfer operation for the RDMA request located in one or more portions of one or more other memory buffers in the local system with the first transfer operation to the remote memory buffer.

49. (Previously Presented) The article of claim 48, additionally comprising instructions that result in a machine transferring the data associated with the first transfer operation.

50. (Previously Presented) The article of claim 49, additionally comprising instructions that result in a machine associating a descriptor with the first transfer operation.

51. (Previously Presented) The article of claim 48, additionally comprising instructions that result in a machine associating data with one or more subsequent transfer operations.

52.   (Previously Presented) The article of claim 51, wherein the first and one or more subsequent transfer operations are performed in response to one or more RDMA (remote direct memory access) requests.

53.   (Previously Presented) The article of claim 48, additionally comprising instructions that result in a machine:

   determining if the amount of data located in the first memory buffer exceeds the maximum transfer size, and:

   if the amount of data located in the first memory buffer exceeds the maximum transfer size:

   associating a portion of the data with the first transfer operation; and

   associating one or more subsequent portions of data located in the first memory buffer with a corresponding number of one or more subsequent transfer operations.

54.   (Previously Presented) The article of claim 53, additionally comprising instructions that result in a machine:

   associating a descriptor with the first transfer operation, the descriptor to specify the remote memory buffer to which the data is to be transferred and to indicate a portion of data remaining to be transferred for the RDMA request; and

   transferring the data associated with the first transfer operation.

55.   (Previously Presented) The article of claim 54, additionally comprising instructions that result in a machine:

   associating a descriptor with each of the one or more subsequent transfer operations; and

   transferring the data associated with the one or more subsequent transfer operations.

56.   (Currently Amended) The method of claim 32, wherein the RDMA request is received via a single function call the portion of data corresponding to an amount

of data that when added with the amount of data in the first memory buffer does not exceed the maximum transfer size.